AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of making an electrically conductive incandescence emitter for incandescence light sources, comprising:

providing a substrate made of tungsten or a tungsten alloy;

using as a sacrificial element for the structuring of at least a part of the ~~emitter~~ substrate a layer made of anodized porous alumina;

wherein said emitter can be led to incandescence through the passage of electric current through the substrate.

2. (previously presented): The method according to claim 1, wherein said structuring comprises obtaining at least one of

- a plurality of nanometric reliefs arranged according to a predefined geometry on at least a surface of the emitter, and

- a plurality of nanometric cavities arranged according to a predefined geometry within the emitter.

3. (currently amended): The method according to claim 2, wherein the alumina layer is obtained through consecutive anodizations of an aluminum film deposited onto a surface of ~~a corresponding~~ the substrate until a regular alumina structure is obtained, which defines a plurality of pores substantially perpendicular to said surface of the substrate the alumina layer having a non-porous portion close to the respective substrate

4. (previously presented): The method according to claim 3, wherein the alumina layer is used either as a sacrificial template during said structuring or as an intermediate template for obtaining a further sacrificial template for said structuring.

5. (previously presented): The method according to claim 2, wherein said structuring comprises deposition of material by evaporation, sputtering, Chemical Vapor Deposition, screen printing or electrodeposition.

6. (previously presented): The method according to claim 2, wherein said structuring comprises etching.

7. (previously presented): The method according to claim 2, wherein said structuring comprises anodization of a metal underlying the alumina layer.

8. (previously presented): The method according to claim 4, wherein said structuring comprises:

- the material designed to make up the desired component having a plurality of reliefs is deposited as a film onto the alumina layer, a part of said material filling said pores, and

- the alumina layer and its substrate are then removed, obtaining the desired component, whose reliefs comprise the part of said material which filled said pores.

9. (previously presented): The method according to claim 8, wherein said material is deposited onto the alumina layer through sputtering or Chemical Vapor Deposition.

10. (previously presented): The method according to claim 4, wherein said structuring comprises:

- the alumina layer is removed from its substrate and opened at its base, removing its nonporous portion, conductive metal film is deposited onto the alumina layer,

- the material designed to make up a desired component having a plurality of reliefs is electrodeposited onto the structure formed by the metal film and the residual part of the alumina layer, a part of said material filling said pores, and

- the residual part of the alumina layer and the metal film are then removed, obtaining the desired component, whose reliefs comprise the part of said material which filled said pores.

11. (previously presented): The method according to claim 4, wherein said structuring comprises:

- the material designed to make up the desired component having a plurality of reliefs is deposited as a serigraphic paste onto the alumina layer, a part of said paste filling said pores,

- said paste is sintered, and

- the alumina layer and its substrate are then removed, obtaining the desired component, whose reliefs comprise the part of said material which filled said pores.

12. (previously presented): The method according to claim 4, wherein said structuring comprises:

- localized parts on the non-porous portion of the alumina layer are removed, to open said pores on their substrate, and

- the material designed to make up a desired component having a plurality of reliefs is deposited through electrochemical methods onto the residual part of the alumina layer, a part of said material filling said pores and getting into contact with their substrate, and the residual part of the alumina layer and its substrate are then removed, obtaining the desired component, whose reliefs comprise the part of said material which filled said pores.

13. (previously presented): The method according to claim 4, wherein the structuring comprises:

- the substrate of the alumina layer undergoes anodization, to induce a growth of the substrate below said pores, said growth resulting in the formation of surface projections of the substrate, which first cause parts of the nonporous portion of the alumina layer to break and then keep on growing within said pores, and

- the alumina layer is removed through selective etching, a desired component having a plurality of reliefs being made by the substrate, said surface projections comprising said reliefs.

14. (previously presented): The method according to claim 8, wherein said desired component is said emitter.

15. (previously presented): The method according to claim 8, where said desired component is said further template.

16. (currently amended): The method according to claim 15, wherein said structuring comprises:

- a layer of the material designed to make up said emitter is deposited onto said further template, and said further template is removed to obtain said emitter ~~(13)~~.

17. (previously presented): The method according to claim 15, wherein said structuring comprises:

- a layer of the material designed to make up said emitter is deposited onto said further template, and said further template is removed to obtain said emitter.

18. (previously presented): The method according to claim 15, wherein said structuring comprises:

- a layer of the material designed to make up said emitter is deposited onto said further template, and said further template is removed to obtain said emitter.

19 (previously presented): The method according to claim 16, wherein the material designed to make up said emitter is deposited onto said further template through sputtering or Chemical Vapor Deposition, and said further template is removed through selective etching.

20. (previously presented): The method according to claim 16, wherein the material designed to make up said emitter is in the form of a serigraphic paste, which is sintered after being deposited onto said further template the latter being then removed through selective etching.

21. (previously presented): The method according to claim 5, wherein said structuring comprises:

- at least a part of the non-porous portion of the alumina layer is removed, said pores being opened on their substrate,

- the substrate is selectively dug in the corresponding open areas on said pores, and

- the residual part of the alumina layer is removed, the substrate comprising said emitter, the dug areas of the substrate comprising said cavities.

22. (previously presented): The method according to claim 21, wherein the substrate is dug on said open areas through Reactive Ion Etching or selective wet etching or electrochemical etching.

23. (previously presented): An emitter for light sources, in particular a filament, which can be led to incandescence through the passage of electric current obtained with the method according to claim 1 the emitter comprising at least one of

- a plurality of nanometric reliefs arranged according to a predefined geometry on at least a surface of the emitter, and

- a plurality of nanometric cavities arranged according to a predefined geometry within the emitter.

24. (previously presented): An emitter according to claim 23, wherein said reliefs comprise an antireflection microstructure, in order to maximize electromagnetic emission from emitter into visible spectrum.

25. (previously presented): An emitter according to claim 23, wherein said cavities are part of a photon crystal structure.

26. (previously presented): Use of anodized porous alumina as a sacrificial element for the structuring of at least a part of an emitter for light sources, which can be led to incandescence through the passage of electric current.

27. (previously presented): Use according to claim 26, wherein alumina is used as template during said structuring.

28. (previously presented): Use according to claim 26, wherein alumina is used as template for obtaining a further template used during said structuring.

29. (previously presented): Use according to claim 26, wherein said structuring comprises obtaining at least one of

- a plurality of nanometric reliefs arranged according to a predefined geometry on at least a surface of the emitter,

- a plurality of nanometric cavities arranged according to a predefined geometry within the emitter.